CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	**Stockwater Development**
Proposed Implementation Date:	July 15th, 2017
Proponent:	Matt Wickens
Location:	21N 19E Section 28
County:	Fergus
Trust:	Common Schools

I. TYPE AND PURPOSE OF ACTION

Larry Tuss & Matt Wickens have requested to install a spur line and stock tank on his state lease to improve grazing distribution. A ¼ mile fence will be constructed at the east end of the tract. The cropland will also be planted back into grass for grazing. This project is in conjunction with the NRCS to facilitate a rotational grazing system.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

Department of Natural Resources and Conservation (DNRC)
Northeastern Land Office (NELO)
Larry Tuss (lessee)
Matt Wickens (Lessee)
NRCS

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

The DNRC, and NELO have jurisdiction over this proposed project.

DNRC is not aware of any other agencies with jurisdiction or other permits needed to complete this project

3. ALTERNATIVES CONSIDERED:

Alternative A (No Action) – Under this alternative, the Department does not grant permission to install the fence, stockwater pipeline and tank.

Alternative B (the Proposed Action) – Under this alternative, the Department does grant permission to install the fence, stockwater pipeline and tank.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

Tables – Erosion Hazard (Off-Road, Off-Trail) – Summary By Map Unit

Summary by Map Unit – Fergus County, Montana (MT027)

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
88	Ethridge silty clay loam, 2 to 8 percent slopes	Slight	Ethridge (90%)		6.8	11.0%
			Evanston (10%)			
161	Marias silty clay, 2 to 8 percent slopes	Slight	Marias (90%)		31.0	50.4%
			Marvan (5%)			
			Kobar (5%)			
223	Tanna-Abor complex, 2 to 8 percent slopes	Slight	Tanna (60%)		22.8	37.0%
			Abor (30%)			
			Kobar (5%)			
235	Thebo-Weingart-Absher clays, 4 to 15 percent slopes	Slight	Thebo (40%)		0.9	1.5%
			Weingart (25%)			
			Absher (15%)			
			Pendroy (5%)			
			Gerdrum (5%)			
Totals for Area of Interest					**61.4**	**100.0%**

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- The will be some ground disturbance and bare ground created associated with the stockwater installation. The effect will be minimal and the bare ground should revegetate naturally within a few growing seasons. All soils are rated as "slight" for off road erosion and no problems are expected in regards to tank, pipeline and fence installation.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

6. AIR QUALITY:
What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

7. VEGETATION COVER, QUANTITY AND QUALITY:
What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

Currently the lease is in crop production. The fields will be planted to a native grass mix to facilitate a rotational grazing plan.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- The will be some ground disturbance and bare ground created associated with the stock water installation. These areas will be prone to noxious weed infestations. Frequent scouting should occur until revegetation has occurred to suppress noxious weed establishment. The pipeline scar will remain visible for many years, due to the disturbance.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:
Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

A search of the Montana Natural Heritage Program for Species of Concern with a state rank of 2 or higher was conducted in the township that includes the area of potential effect. (State rank of 3 means Potentially at risk because of **limited** and/or **declining** numbers, range and/or habitat, even though it may be abundant in some areas.)

Species of Concern
2 Species
Filtered by the following criteria:
State Rank = S1, S2 or S3
Township = 021N019E (based on mapped Species Occurrences)

BIRDS (AYES) — 2 SPECIES

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Centrocercus urophasianus Greater Sage-Grouse	*Phasianidae* Upland Game Birds	G3G4	S2		Sensitive - Known on Forests (BD) Sensitive - Suspected on Forests (CG, HLC)	SENSITIVE	SGCN2	17%	75%	Sagebrush
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Bowman, Butte, Carbon, Carter, Chouteau, Custer, Dawson, Deer Lodge, Fallon, Fergus, Gallatin, Garfield, Golden Valley, Harding, Hill, Madison, Mccone, Meagher, Musselshell, Park, Petroleum, Phillips, Powder River, Prairie, Rosebud, Silver Bow, Slope, Stillwater, Sweet Grass, Treasure, Valley, Wheatland, Wibaux, Yellowstone									
Gymnorhinus cyanocephalus Pinyon Jay	*Corvidae* Jays / Crows / Magpies	G5	S3	MBTA; BCC17			SGCN3	5%	55%	Open conifer forest
		Species Occurrences verified in these Counties: Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Fergus, Gallatin, Garfield, Golden Valley, Jefferson, Lewis and Clark, Musselshell, Park, Petroleum, Phillips, Powder River, Rosebud, Stillwater, Sweet Grass, Wheatland, Yellowstone									

Alternative A (No Action)- Continued farming will keep the land as unsuitable habitat for sage grouse.

Alternative B (the Proposed Action)- Nearest Sage grouse lek is 1/4 mile to the NW. Temporary displacement or incidental take may occur during construction of the fence stockwater pipeline and tank. Fence strikes have been documented with Sage grouse and the addition of the fence may influence the species. Although the fence will aide in a proper grazing rotation aimed at benefiting the sage grouse. Returning the cropland to a native plant community will add habitat that was otherwise unsuitable.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:
Identify and determine effects to historical, archaeological or paleontological resources.

A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search revealed that *Antiquities* have not been identified in the APE. No additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

Alternative A (No Action) - No effect anticipated.

Alternative B (the Proposed Action) - No effect anticipated.

11. AESTHETICS:
Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:
Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:
List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

Alternative A (No Action)-No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:
Identify any health and safety risks posed by the project.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:
Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:
Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

18. DEMAND FOR GOVERNMENT SERVICES:
Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:
List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:
Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

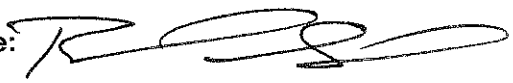
Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:
Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

EA Checklist Prepared By:	**Name:**	Brandon Sandau
	Title:	Land Use Specialist
Signature: 	**Date**: June 8, 2017	

V. FINDING

25. ALTERNATIVE SELECTED:

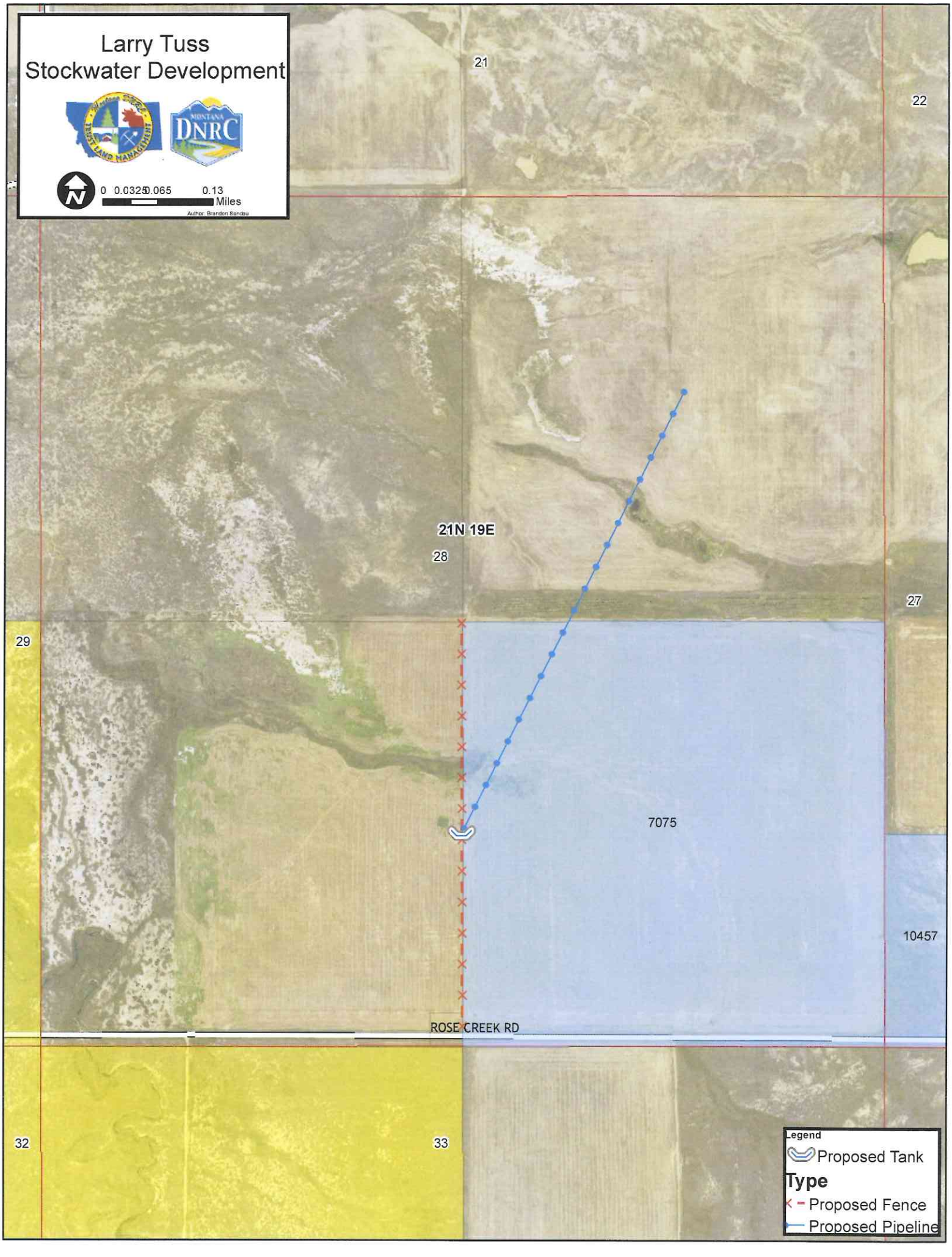
Alternative B (the Proposed Action) – Under this alternative, the Department does grant permission to install the fence, stockwater pipeline and tank.

26. SIGNIFICANCE OF POTENTIAL IMPACTS: No significant impacts expected.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

	EIS		More Detailed EA	XXX	No Further Analysis

EA Checklist Approved By:	**Name:**	Barny D. Smith
	Title:	Unit Manager, Northeastern Land Office
Signature:		**Date**: June 8, 2017


Larry Tuss
Stockwater Development
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Miles
Author: Brandon Sandau
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Legend
Proposed Tank
Type
Proposed Fence
Proposed Pipeline